

REMARKS

1. Applicant thanks the Examiner for the Examiner's comments which have greatly
5 assisted Applicant in responding, especially in Response to Arguments.

2. **35 U.S.C. §112, second paragraph.**

The Examiner rejected Claim 12 under 35 U.S.C. §112, second paragraph, as being
10 indefinite to particularly point out and distinctly claim the subject matter which Applicant
regards as the invention.

Further, the Examiner stated it is unclear from the claim language what Applicant is
trying to claim.

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(a) Regarding lines 3-8, the Examiner asked, "Do Applicants' mean '..., each of the
sections being about the same size as the memory used by an operating system...; and
a control program which received a request for the storage of a data record and selects
one of the sections based upon a key...?'"

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Lines 3-5 appear as follows:

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a plurality of sections, each of the sections being about the same memory
size that is used by an operating system to transfer data between a primary storage
and a secondary storage; and

Applicant is of the opinion that "...about the same memory size that is used by an
operating system to transfer data between a primary storage and a secondary
storage" is clear and unambiguous and is meaningful to one skilled in the art.

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Nevertheless, support can be found in the application as filed, on page 8, lines 3-10 (the first full paragraph), wherein a clear description is provided as well as a tangible example:

5 Figure 3 illustrates an exemplary database data structure according to one embodiment of the present invention. The database data structure 200 is partitioned into a number of sections. Preferably, the size of each of the sections is an integer multiple of same size that is used to transfer data between the primary storage 196 and the secondary storage 198 by the operating system (not shown). For example,
10 for an embodiment of the present invention that is designed for use with Sun Solaris 2.5.1 of UNIX available from Sun Microsystems, Inc., the page size can be defined to be either or 8,192 16,384, or 32,768 bytes.

(b) Further regarding lines 6-8, the Examiner asked, "Do Applicants' mean... and a
15 control program which receives a request for the storage of a data record and selects one of the sections based upon a key...?"

Lines 6-8 appear as follows:

20 a control program which receives a request for the storage of a data record, the control program selecting one of the sections based upon a key and storing the data record in the selected section;

Applicant is of the opinion that the meaning is clear and unambiguous, that the control
25 program which receives a request for the storage of a data record and selects one of the sections based upon a key. However, to further clarify the meaning, support can be found throughout the application as filed, and; as an example, on page 12, lines 10 – 13, as follows:

As parameters to the put function, the client application 190 passes a new data record. The new data record is identical in format to the data records 232. At the state 804, the database manager 192 identifies a data section based upon the key that is identified by the key field 316 of the new data record.

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(c) Regarding lines 19-21, the Examiner asked, "Do Applicants' mean 'if said sum is greater than said size of said data record, the greater size deletes one or more data records...?'" The Examiner stated, "It is unclear what deletes the one or more data records from the selected section and stores the data record...".

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Lines 19-21 appear as follows:

if said sum is greater than said size of said data record, then deletes one or more data records from the selected section and stores the data record in the selected section.

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Applicant is of the opinion that the claim construction is clear and consistent. Lines 19-21 are part of a wherein clause, as follows (emphasis added):

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wherein the control program:

determines if said data record fits in an unused space on said selected section;

if said data record fits in said unused space, then stores said data record in said selected section;

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if a size of said data record is greater than a size of said unused space, then ranks all data records on said selected section according to a ranking function;

sums sizes of said all data records below rank of said data record;

if said sum is not greater than said size of said data record, then ends process; and

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if said sum is greater than said size of said data record, then deletes one or more data records from the selected section and stores the data record in the selected section.

- 5 Applicant is of the opinion that by reproducing the wherein clause of Claim 12, which includes lines 19-21 with verbs underlined to emphasize what the control program does, is a complete response and overcomes the Examiner's rejection.

In view of all of the above, Applicant is of the opinion that the rejection is overcome.

- 10 Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. §112, second paragraph.

3. 35 U.S.C. §101.

- 15 The Examiner rejected Claims 1, 3-8 and 10-11 under 35 U.S.C. §101 as non-statutory.

Applicant disagrees and is of the opinion that the preamble of the independent claims are clearly drawn to statutory subject matter and, by extension, the entire body of each of the claims. Nevertheless, to further clarify the claimed invention, Applicant has
20 amended the claims accordingly.

Therefore, Applicant respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. §101.

25 4. 35 U.S.C. §103(a).

(a) The Examiner has rejected Claims 1, 3, 4, 30, and 32 under 35 U.S.C. §103(a) as being unpatentable over Take (U.S. Patent No. 6,442,553) in view Fecteau (U.S. Patent No. 5,594,881) and further in view of Nemes (U.S. Patent No. 5,893,120).

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Claims 1 and 30

The Examiner stated that Take teaches "determining if said new data record fits in an unused space on said identified section" and cites col. 1, lines 45-63.

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Applicant respectfully disagrees. Applicant incorporates herein the arguments from the previous response dated 25 August 2004. For convenience, Applicant provides herein below a copy of the previous argument. In addition, Applicant has amended the independent claims to further clarify the invention.

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Applicant respectfully points out that Claims 1 and 30 clearly first receive a new data record, then identify a section based on the key of the new record, and then, **before putting or writing such record**, determining if the newly received data record fits in an used space on the identified section based on its size.

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Support can be found in the Specification on page 13 lines 10-14:

"Referring again to the decision state 812, the database management system 106 Figure 2) determines whether the matching pre-existing data record is the same size or larger than the new data record."

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Further support can be found in the Specification on page 14 lines 6-10:

"Referring again to state 812 and Figure 7, if the database management system 106 Figure 2) at the state 812 determines that the pre-existing data record is smaller than the new data record, the database management system 106 (Figure 2) proceeds to a state 820. Since the new data record will not fit in the space occupied by the pre-existing data record, an overwrite operation cannot be performed."

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In stark contrast, Take **first puts, i.e. writes the data record and then determines** if the entire record storage unit is filled. Support can be found in col. 1, lines 36-50 (emphasis added):

5 As shown in FIG. 2, after starting the hash process, a group of records is read into the input buffer 3 from the hash list 1 (step S1). **Next, one record is output from the input buffer 3 (step S2), the hash function value of the record is calculated based on the key value of the record using a hash function (step S3), and the record is stored in one of the record buffers 4** which corresponds to the hash
10 function value of the record (step S4).

After that, whether or not the record buffer 4 is full is determined (step S5), and then all of the records stored in the record buffer 4 are output to the corresponding one of the hashed lists 5 in the disc storage unit (step S6) if the record buffer 4 is full
15 (YES, in step S5), and the process goes to step S7. If the record buffer 4 is not full (NO, in step S5), the process directly goes to step S7, and whether or not there is a record left in the input buffer 3 is determined (step S7).

Clearly, Take does not disclose, teach, or suggest the claimed invention because, in
20 particular, it does not teach the step of responsive to receiving the new data record, determining if the identified section has sufficient space to contain the new data record, and does not disclose, teach, or suggest the claimed invention as a whole.

None of Take, Fecteau not Nemes disclose, teach, or suggest the claimed invention
25 alone or in combination. Therefore, Applicant is of the opinion that amended Claim 1 and hence its dependent claims are in allowable condition. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. §103(a).

(b) The Examiner has rejected Claims 5-7 under 35 U.S.C. §103(a) as being unpatentable over Take (U.S. Patent No. 6,442,553) and Nemes (U.S. Patent No. 5,893,120) in view of Nguyen (U.S. Patent No. 5,809,494).

5 Claims 5-7 are dependent upon an independent claim deemed in allowable condition. Accordingly, Claims 5-7 are deemed to be in allowable condition. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. §103(a).

10 (c) The Examiner has rejected Claims 8, 10, 11, and 33-35 under 35 U.S.C. §103(a) as being unpatentable over Take (U.S. Patent No. 6,442,553) in view of Fecteau (U.S. Patent No. 5,594,881), and in view of Nguyen (U.S. Patent No. 5,809,494) and further in view of Nemes (U.S. Patent No. 5,893,120).

15 In view of discussion hereinabove, Applicant is of the opinion that amended Claim 8 and its dependent claims are deemed in allowable condition. Claim 33-35 are dependent on amended independent Claim 30 deemed to be in allowable condition as discussed hereinabove. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. §103(a).

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(d) The Examiner has rejected Claims 12 and 14-29 under 35 U.S.C. §103(a) as being unpatentable over Nguyen (U.S. Patent No. 5,809,494) and Take (U.S. Patent No. 6,442,553) in view of Nemes (U.S. Patent No. 5,893,120) and further in view of Fecteau (U.S. Patent No. 5,594,881).

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In view of the discussion hereinabove, Applicant is of the opinion that amended Claims 12 and 20 and the respective dependent claims are deemed in allowable condition. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. §103(a).

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(e) The Examiner has rejected Claims 36 and 37 under 35 U.S.C. §103(a) as being unpatentable over Nguyen (U.S. Patent No. 5,809,494) in view of Fecteau (U.S. Patent No. 5,594,881).

5 In view of the discussion hereinabove, Applicant is of the opinion that amended Claims 36 and 37 are deemed in allowable condition. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection under 35 U.S.C. §103(a).

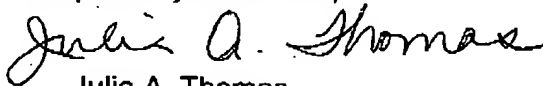
(f) The Examiner has rejected Claim 38 under 35 U.S.C. §103(a) as being unpatentable
10 over Nguyen (U.S. Patent No. 5,809,494) in view of Nemes (U.S. Patent No. 5,893,120).

In view of the discussion hereinabove, Applicant is of the opinion that amended Claim 38 is deemed in allowable condition. Accordingly, Applicant respectfully requests that
15 the Examiner withdraw the rejection under 35 U.S.C. §103(a).

5. It should be appreciated that Applicant has elected to amend Claims solely for the purpose of expediting the patent application process in a manner consistent with the PTO's Patent Business Goals, 65 Fed. Reg. 54603 (9/8/00). In making such
20 amendment and cancellations, Applicant has not and does not in any way narrow the scope of protection to which Applicant considers the invention herein to be entitled. Rather, Applicant reserves Applicant's right to pursue such protection at a later point in time and merely seeks to pursue protection for the subject matter presented in this submission.

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Respectfully Submitted,



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